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NOV-21-2002

REMARKS/ARGUMENTS

Claims 1-3, 6-16 and 19-27 have been presented for examination in the parent U.S. Patent Application.

10 Claims 1-3, 6-16, and 19-27 have been rejected in the Office Action dated July 17 2002, the Office action imposing a final rejection on all Claims.

Claims 1, 10, 14, and 27 have been amended by this Preliminary Amendment.

Claims 1-3, 6-16, and 19-27 are in the Application and reconsideration of the application is hereby respectfully requested.

Claims 1-3, 6-16, and 19-27 in the parent Application were rejected under 35 U.S.C. 103 as being unpatentable over U.S. Patent 5,598,560 issued in the name of Benson in view of U.S. Patent 5,933,641 issued in the name of Ma. Claims 1, 14, and 27, the independent Claims in the Application have been amended to emphasize an important aspect of the invention. That aspect is the ability of display the results of the original source file elements and the translation source file elements side by side to insure that the translation is correct. Note in particular that elements has a particular meaning. For example, page 9, lines 22-23 states "The source elements include source instructions, comments, derivatives, and the like." What is not included are the results of the computation. That is exactly what the Ma reference displays. The Ma reference displays the results of performing a numeric computation. The reason is that the Ma reference seeks to determine the best data format for displaying the results. This selection is most explicitly stated in Claim 4 of the Ma reference wherein in claim element c.) through e.) states "the data format provided by the enhanced numeric handler selected by the programmer; the data format changed without effecting any physical data or program in the DSP; the data format can be selected from a menu of a wide range of formats selected from the group consisting of single and double precision, decimal and hexadecimal, and floating point and fixed point."

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Note that the foregoing quotation emphasizes one of the features of the Ma reference, that feature is that the program is not changed, just the data format of the results. In fact the Ma reference, as indicated by this quotation, teaches away from the present invention that is directed toward not changing the data format (which is established in the source code) but in changing the translation program in the sense of brining the translation program into conformity with the source program. Because of this "teaching away", the rejection based on the Ma reference is traversed.

The Benson reference with which Examiner is combining the Ma reference is specifically directed to changing a program. Because the Ma reference specifically does not change the program, only the presentation of the numeric results, the Ma reference teaches away from the Benson reference. Examiner is clearly combining these references based on the teaching of the present invention and not on the fact that two references combine to provide the result of the present invention. For this reason, rejection of Claims 1-3, 6-16, and 19-27, as amended, under 35 USC 103(a) as being unpatentable over Benson in view of Ma is respectfully traversed...

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Furthermore, referring to the section of the Ma reference, i.e., column 5 lines 40-50, cited by Examiner, no reference is made to a comparison of the data by a side-by-side comparison or by aligning related data. Reference is made to a "viewing" of the user to numerical results, but this comparison is never described as being performed by aligning the results or by a side-by-side comparison. Indeed, the viewing of the results is performed after separate computations. Furthermore, the viewing is not performed of the source and translation program results, but with the results of a plurality of numerical results. Because the viewing involves only the results numerical computation and the not the program elements which are the subject of the present invention, rejection of Claims 1-3, 6-16, and 19-27 under 35 USC 103(a) as being unpatentable over Benson in view of Ma is respectfully traversed.

With respect to the Benson reference, the Benson reference includes an intermediate file. Thus, in the Benson reference the procedure is source files -> intermediate files -> translation files. This is clearly specified in the independent Claims 1, 9, and 14. (The remaining

independent claim, Claim 21, relates to reporting code errors and not to the code translation itself.) Reference to Fig. 2 of the instant Application that describes a code translation procedure does not reference an intermediate file. Therefore, the Benson reference includes a claim element that is not found in the present invention making the present invention patentable over the Benson reference. Therefore, rejection of Claims 1-3, 6-16, and 19-27 under 35 U.S.C. 103(a) as being unpatentable over Benson in view of Ma is respectfully traversed.

In view of the foregoing amendments and the foregoing discussion, it is believed that Claims 1-3, 6-16, and 19-27 are now in condition for allowance and a timely Notice of Allowance of Claims 1-3, 6-16, and 19-27 is hereby respectfully requested.

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Should any matters remain incomplete that can be resolved by a telephonic interview, Examiner is requested to call the undersigned attorney at 281-274 4064.

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Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the specification:

Paragraph beginning at line 11 of page 9 has been amended as follows:

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The data storage 12 includes data files 20 and tool resource files 22. Generally described, the data files 20 include the source files 24, 26 that are processed by the translation toll 14 to generate translation files 24, 26 28, 30. The toll resource files 22 include files used by the translation tool in processing the data files 20 that may be built into the tool 14 or separately loaded when needed.

In the claims:

Claim I has been amended as follows:

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- 1. (Amended) A translation system for translating a source assembly language program for a source device into a translation assembly language program for a target device, the system comprising:
 - a front end for identifying source elements in the source program; and
- a back end for generating the translation program having translation elements corresponding to translation of the identified source elements, the backend including a graphic user interface, the graphic user interface for comparing displaying the identified source elements aligned with the corresponding translation elements, the interface the back end including a display processor receiving inputs having an input unit, the input unit permitting a user to for modifying modify the translation elements based on comparison with the aligned source elements.

Claim 10 has been amended as follows:

35 10. (Amended) The system as recited in claim 1 wherein the <u>graphic</u> user interface is a <u>graphic user interface display processor</u>.

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Claim 14 has been amended as follows:

14. (Amended) A method for performing translation of an assembly language source program into an assembly language translation program, the method comprising:

receiving the source program;

identifying source elements in the source program;

generating the translation program having translation elements by performing a context-dependent translation of the source elements;

displaying the translation elements in an a graphic user interface for receiving user inputs, the graphic user interface aligning the source element and the translation element, the aligned elements permitting a comparison of related source elements and translation elements; and

in response to user inputs, automatically regenerating selected translation elements based on the user inputs comparison...

- 20 Claim 27 has been amended as follows:
 - 27. (Amended) A translation system for translating a source program into a translation program, the system comprising:

a computer capable of executing a program,

an interactive program for translating code for a first processor into code for a second processor and capable of being executed on said computer, and

a graphics interface system displaying source program elements proximate corresponding translation program elements, the graphics interface system permitting the comparison of corresponding source program elements and translation program elements, the graphic interface unit having a user input device, the user input permitting correction of the translation program elements by a user based on the comparison.

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